

**Notice of Allowability**

Application No.

09/777,343

Examiner

Dwayne K Handy

Applicant(s)

MARQUISS ET AL.

Art Unit

1743

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment/arguments filed 10/10/2003.
2. ☒ The allowed claim(s) is/are 1-19,30 and 32-39.
3. ☒ The drawings filed on 05 February 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 3 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No. <u>9/15/2003</u> | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment                  |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                      | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other _____  |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. James Abney on 12/8/03.

2. The application has been amended as follows:

Claims 31 and 59 have been canceled.

In claim 30, line 9, after "reservoir" the phrase --wherein the dispense tips are configured to dispense droplets in a range of volumes less than about 5 microliters per droplet without contacting the droplet to a surface.-- has been added.

3. The following is an examiner's statement of reasons for allowance.

In claim 1, applicant has claimed a fluid delivery system comprised of the following elements: a fluid source, a positive displacement pump, a dispenser assembly with an orifice and a conduit path from the pump to the orifice of the dispenser assembly. A main feature of the system is that *operation of the positive displacement pump provides non-contact deposition of fluid aliquots having a volume of less than about 5 microliters per aliquot without closing or constricting the conduit path between the deposition of successive fluid aliquots.* The Examiner agrees with applicant that this

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feature is not taught nor suggested by the previously cited reference "Pelc". Pelc does not teach the use of a positive displacement pump which operates to eject fluid aliquots from their dispensing element. The Examiner considers "Pelc" to be the closest prior art cited.

In the newly amended claim 30, applicant has a fluid dispensing system comprised of an array of dispense tips with each tip connected to a separate syringe pump, a fluid source bank having plural fluid reservoirs, a changeable fluid conduit network *capable of permitting the pumps to be connected to any subsets of different reservoirs, and having dispense tips configured to dispense droplets in a range of volumes including volumes less than about 5 microliters per droplet without contacting the droplet to a surface.* The Examiner did not find prior art which taught this combination of elements. The Examiner considers the previously cited reference "Koike" to be the closest prior art. Koike teaches dispensing banks, but does not teach interchangeable subsets and does not teach dispensing tips configured for non-contact deposition of less than about 5 microliters per droplet.

In claim 35, applicant has claimed a dispensing device comprised of a fluid reservoir, a syringe pump device connected to the reservoir and a dispense element operatively connected to the pump wherein the *pump drives fluid incrementally to the dispense element with sufficient velocity so that a fluid aliquot of less than about five microliters separates from the dispense element without contacting the sample or the sample holder.* Again the Examiner considers the previously cited reference of "Pelc" to

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be the closest prior art. Pelc does not teach a syringe pump connected to the dispenser.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K Handy whose telephone number is (703)-305-0211. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (703)-308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.

Dkh  
December 9, 2003

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700